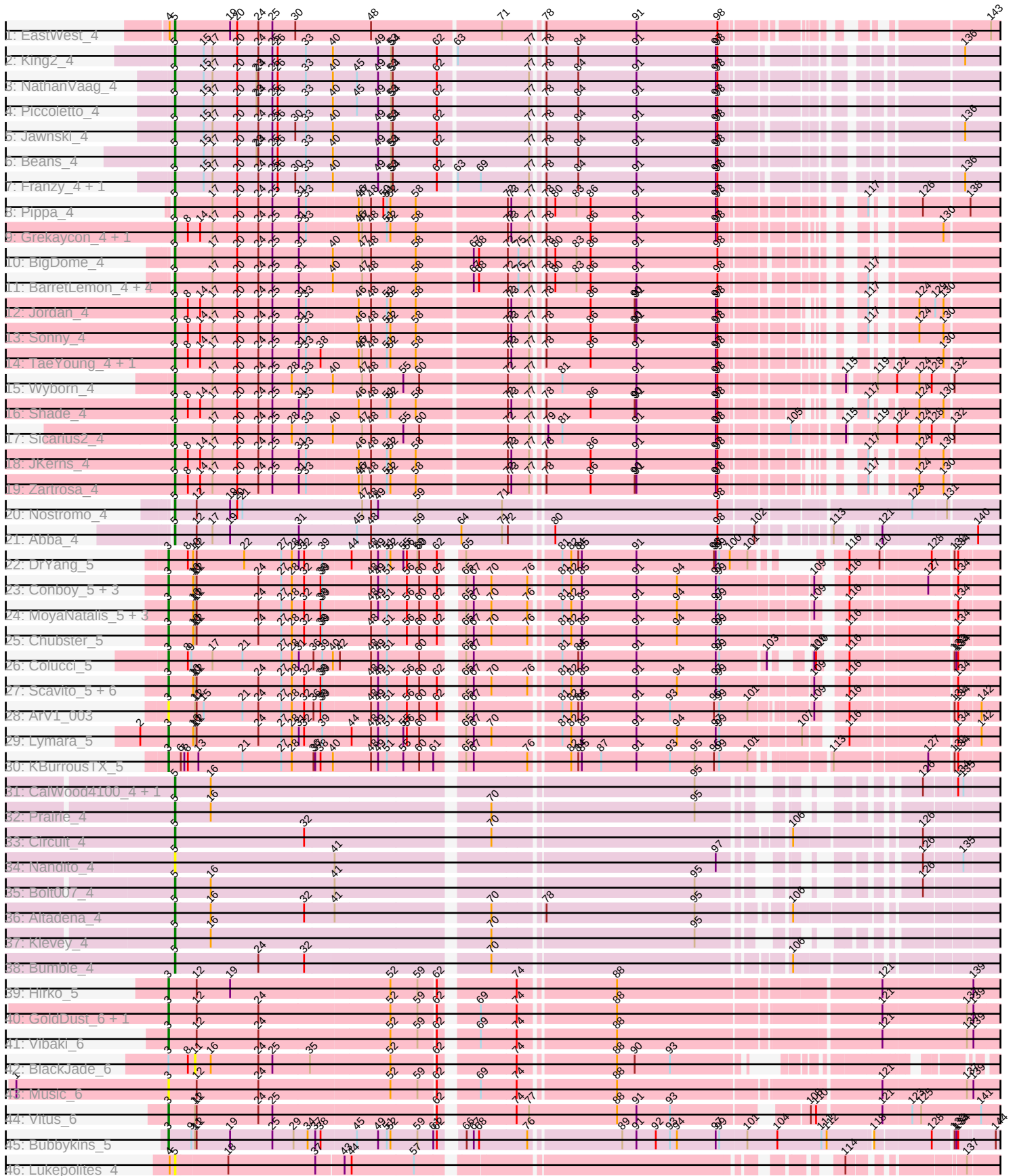


Zoomed Pham 329023



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 329023 Report

This analysis was run 09/05/26 on database version 662.

Pham number 329023 has 67 members, 7 are drafts.

Phages represented in each track:

- Track 1 : EastWest_4
- Track 2 : King2_4
- Track 3 : NathanVaag_4
- Track 4 : Piccoletto_4
- Track 5 : Jawnski_4
- Track 6 : Beans_4
- Track 7 : Franzy_4, Brent_4
- Track 8 : Pippa_4
- Track 9 : Grekaycon_4, BossLady_4
- Track 10 : BigDome_4
- Track 11 : BarretLemon_4, StevieBAY_4, GravityBall_4, Timinator_4, LeeroyJ_4
- Track 12 : Jordan_4
- Track 13 : Sonny_4
- Track 14 : TaeYoung_4, Martha_4
- Track 15 : Wyborn_4
- Track 16 : Shade_4
- Track 17 : Sicarius2_4
- Track 18 : JKerns_4
- Track 19 : Zartrosa_4
- Track 20 : Nostromo_4
- Track 21 : Abba_4
- Track 22 : DrYang_5
- Track 23 : Conboy_5, EdgarPoe_5, Chipper1996_50, Tophat_5
- Track 24 : MoyaNatalis_5, Linus_5, PrincessTrina_5, JayCookie_5
- Track 25 : Chubster_5
- Track 26 : Colucci_5
- Track 27 : Scavito_5, JaNo_5, HumptyDumpty_5, Mordred_5, RosiePosie_5, Kabreeze_5, Chocolat_5
- Track 28 : ArV1_003
- Track 29 : Lymara_5
- Track 30 : KBurrousTX_5
- Track 31 : CalWood4100_4, Lilmac1015_4
- Track 32 : Prairie_4
- Track 33 : Circuit_4
- Track 34 : Nandito_4
- Track 35 : Bolt007_4
- Track 36 : Altadena_4

- Track 37 : Klevey_4
- Track 38 : Bumble_4
- Track 39 : Hirko_5
- Track 40 : GoldDust_6, Gooberta_6
- Track 41 : Vibaki_6
- Track 42 : BlackJade_6
- Track 43 : Music_6
- Track 44 : Vitus_6
- Track 45 : Bubbykins_5
- Track 46 : Lukepolites_4

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 5, it was called in 35 of the 60 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abba_4, Altadena_4, BarretLemon_4, Beans_4, BigDome_4, Bolt007_4, BossLady_4, Brent_4, Bumble_4, CalWood4100_4, Circuit_4, EastWest_4, Franzy_4, GravityBall_4, Grekaycon_4, JKerns_4, Jawnski_4, Jordan_4, King2_4, Klevey_4, LeeroyJ_4, Lilmac1015_4, Lukepolites_4, Martha_4, Nandito_4, NathanVaag_4, Nostromo_4, Piccoletto_4, Pippa_4, Prairie_4, Shade_4, Sicarius2_4, Sonny_4, StevieBAY_4, TaeYoung_4, Timinator_4, Wyborn_4, Zartrosa_4,

Genes that have the "Most Annotated" start but do not call it:

-

Genes that do not have the "Most Annotated" start:

- ArV1_003, BlackJade_6, Bubbykins_5, Chipper1996_50, Chocolat_5, Chubster_5, Colucci_5, Conboy_5, DrYang_5, EdgarPoe_5, GoldDust_6, Gooberta_6, Hirko_5, HumptyDumpty_5, JaNo_5, JayCookie_5, KBurrousTX_5, Kabreeze_5, Linus_5, Lymara_5, Mordred_5, MoyaNatalis_5, Music_6, PrincessTrina_5, RosiePosie_5, Scavito_5, Tophat_5, Vibaki_6, Vitus_6,

Summary by start number:

Start 3:

- Found in 29 of 67 (43.3%) of genes in pham
- Manual Annotations of this start: 25 of 60
- Called 96.6% of time when present
- Phage (with cluster) where this start called: ArV1_003 (AR), Bubbykins_5 (UNK), Chipper1996_50 (AR), Chocolat_5 (AR), Chubster_5 (AR), Colucci_5 (AR), Conboy_5 (AR), DrYang_5 (AR), EdgarPoe_5 (AR), GoldDust_6 (FL), Gooberta_6 (FL), Hirko_5 (FL), HumptyDumpty_5 (AR), JaNo_5 (AR), JayCookie_5 (AR), KBurrousTX_5 (AR), Kabreeze_5 (AR), Linus_5 (AR), Lymara_5 (AR), Mordred_5 (AR), MoyaNatalis_5 (AR), Music_6 (FL), PrincessTrina_5 (AR), RosiePosie_5 (AR), Scavito_5 (AR), Tophat_5 (AR), Vibaki_6 (FL), Vitus_6 (FL),

Start 5:

- Found in 38 of 67 (56.7%) of genes in pham
- Manual Annotations of this start: 35 of 60
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Abba_4 (AO3), Altadena_4 (FH), BarretLemon_4 (AO2), Beans_4 (AO1), BigDome_4 (AO2), Bolt007_4 (FH), BossLady_4 (AO2), Brent_4 (AO1), Bumble_4 (FH), CalWood4100_4 (FH), Circuit_4 (FH), EastWest_4 (AO), Franzy_4 (AO1), GravityBall_4 (AO2), Grekaycon_4 (AO2), JKerns_4 (AO2), Jawnski_4 (AO1), Jordan_4 (AO2), King2_4 (AO1), Klevey_4 (FH), LeeroyJ_4 (AO2), Lilmac1015_4 (FH), Lukepolites_4 (singleton), Martha_4 (AO2), Nandito_4 (FH), NathanVaag_4 (AO1), Nostromo_4 (AO3), Piccoletto_4 (AO1), Pippa_4 (AO2), Prairie_4 (FH), Shade_4 (AO2), Sicarius2_4 (AO2), Sonny_4 (AO2), StevieBAY_4 (AO2), TaeYoung_4 (AO2), Timinator_4 (AO2), Wyborn_4 (AO2), Zartrosa_4 (AO2),

Start 11:

- Found in 21 of 67 (31.3%) of genes in pham
- No Manual Annotations of this start.
- Called 4.8% of time when present
- Phage (with cluster) where this start called: BlackJade_6 (FL),

Summary by clusters:

There are 9 clusters represented in this pham: singleton, AO, AR, AO3, AO2, AO1, FH, UNK, FL,

Info for manual annotations of cluster AO:

- Start number 5 was manually annotated 1 time for cluster AO.

Info for manual annotations of cluster AO1:

- Start number 5 was manually annotated 7 times for cluster AO1.

Info for manual annotations of cluster AO2:

- Start number 5 was manually annotated 18 times for cluster AO2.

Info for manual annotations of cluster AO3:

- Start number 5 was manually annotated 2 times for cluster AO3.

Info for manual annotations of cluster AR:

- Start number 3 was manually annotated 19 times for cluster AR.

Info for manual annotations of cluster FH:

- Start number 5 was manually annotated 7 times for cluster FH.

Info for manual annotations of cluster FL:

- Start number 3 was manually annotated 5 times for cluster FL.

Info for manual annotations of cluster UNK:

- Start number 3 was manually annotated 1 time for cluster UNK.

Gene Information:

Gene: Abba_4 Start: 3380, Stop: 5437, Start Num: 5

Candidate Starts for Abba_4:

(Start: 5 @3380 has 35 MA's), (12, 3416), (17, 3443), (19, 3473), (31, 3590), (45, 3683), (48, 3707), (59, 3785), (64, 3860), (71, 3929), (72, 3938), (80, 4001), (98, 4277), (102, 4331), (113, 4415), (121, 4460), (140, 4616), (152, 4700), (154, 4715), (163, 4802), (173, 4856), (200, 5102), (205, 5129), (224, 5252), (238, 5318), (247, 5426),

Gene: Altadena_4 Start: 3360, Stop: 5243, Start Num: 5

Candidate Starts for Altadena_4:

(Start: 5 @3360 has 35 MA's), (16, 3420), (32, 3579), (41, 3627), (70, 3867), (78, 3942), (95, 4194), (106, 4317), (146, 4623), (161, 4752), (180, 4782), (188, 4836), (225, 5094), (232, 5115), (243, 5214),

Gene: ArV1_003 Start: 2866, Stop: 4833, Start Num: 3

Candidate Starts for ArV1_003:

(Start: 3 @2866 has 25 MA's), (11, 2911), (12, 2914), (15, 2926), (21, 2992), (24, 3019), (27, 3058), (28, 3076), (32, 3097), (36, 3112), (38, 3124), (39, 3127), (48, 3205), (49, 3217), (51, 3232), (56, 3265), (60, 3286), (62, 3316), (65, 3340), (67, 3352), (81, 3484), (82, 3499), (84, 3511), (85, 3517), (91, 3610), (93, 3667), (96, 3742), (99, 3751), (101, 3799), (109, 3880), (116, 3916), (132, 4069), (134, 4075), (142, 4108), (146, 4147), (154, 4201), (166, 4279), (170, 4294), (172, 4306), (175, 4318), (178, 4330), (179, 4339), (186, 4393), (191, 4444), (198, 4516), (200, 4534), (208, 4579), (220, 4654), (226, 4684), (229, 4693), (236, 4723), (240, 4792),

Gene: BarretLemon_4 Start: 3437, Stop: 5149, Start Num: 5

Candidate Starts for BarretLemon_4:

(Start: 5 @3437 has 35 MA's), (17, 3500), (20, 3542), (24, 3578), (25, 3602), (31, 3647), (40, 3701), (47, 3746), (48, 3761), (58, 3836), (67, 3923), (68, 3932), (72, 3980), (75, 3998), (77, 4016), (78, 4028), (80, 4043), (83, 4079), (86, 4103), (91, 4181), (98, 4319), (117, 4472), (150, 4667), (156, 4733), (160, 4769), (189, 4937), (195, 5024), (199, 5066), (202, 5078), (205, 5096), (207, 5111), (212, 5141),

Gene: Beans_4 Start: 3427, Stop: 5187, Start Num: 5

Candidate Starts for Beans_4:

(Start: 5 @3427 has 35 MA's), (15, 3475), (17, 3490), (20, 3532), (23, 3565), (24, 3568), (25, 3592), (26, 3601), (33, 3649), (40, 3694), (49, 3766), (53, 3787), (54, 3790), (62, 3865), (77, 4009), (78, 4021), (84, 4075), (91, 4174), (97, 4309), (98, 4312), (150, 4705), (158, 4786), (160, 4807), (164, 4819), (177, 4897), (190, 5005), (201, 5113), (204, 5134), (205, 5137),

Gene: BigDome_4 Start: 3437, Stop: 5146, Start Num: 5

Candidate Starts for BigDome_4:

(Start: 5 @3437 has 35 MA's), (17, 3500), (20, 3542), (24, 3578), (25, 3602), (31, 3647), (40, 3701), (47, 3746), (48, 3761), (58, 3836), (67, 3923), (68, 3932), (72, 3980), (75, 3998), (77, 4016), (78, 4028), (80, 4043), (83, 4079), (86, 4103), (91, 4181), (98, 4319), (149, 4661), (156, 4730), (158, 4745), (189, 4934), (194, 5012), (202, 5075), (205, 5093), (207, 5108),

Gene: BlackJade_6 Start: 5104, Stop: 6645, Start Num: 11

Candidate Starts for BlackJade_6:

(Start: 3 @5059 has 25 MA's), (8, 5092), (11, 5104), (16, 5131), (24, 5212), (25, 5236), (35, 5299), (52, 5431), (62, 5503), (74, 5614), (88, 5767), (90, 5797), (93, 5857), (154, 6283), (159, 6352), (211, 6637),

Gene: Bolt007_4 Start: 3372, Stop: 5204, Start Num: 5

Candidate Starts for Bolt007_4:

(Start: 5 @3372 has 35 MA's), (16, 3432), (41, 3642), (95, 4209), (126, 4431), (146, 4557), (157, 4653), (188, 4770), (203, 4914), (228, 5037), (240, 5139), (244, 5154),

Gene: BossLady_4 Start: 3446, Stop: 5158, Start Num: 5

Candidate Starts for BossLady_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (46, 3749), (47, 3755), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (91, 4190), (97, 4325), (98, 4328), (130, 4562), (158, 4754), (160, 4775), (183, 4895), (187, 4943), (189, 4946), (193, 5006), (199, 5075), (202, 5087), (207, 5120),

Gene: Brent_4 Start: 3427, Stop: 5181, Start Num: 5

Candidate Starts for Brent_4:

(Start: 5 @3427 has 35 MA's), (15, 3475), (17, 3490), (20, 3532), (24, 3568), (25, 3592), (26, 3601), (30, 3631), (33, 3649), (40, 3694), (49, 3766), (53, 3787), (54, 3790), (62, 3865), (63, 3889), (69, 3928), (77, 4009), (78, 4021), (84, 4075), (91, 4174), (97, 4309), (98, 4312), (136, 4618), (150, 4699), (158, 4780), (164, 4813), (177, 4891), (201, 5107), (204, 5128), (205, 5131),

Gene: Bubbykins_5 Start: 4237, Stop: 6276, Start Num: 3

Candidate Starts for Bubbykins_5:

(Start: 3 @4237 has 25 MA's), (9, 4276), (11, 4282), (12, 4285), (19, 4342), (25, 4414), (29, 4450), (34, 4474), (37, 4486), (38, 4495), (45, 4552), (49, 4588), (51, 4603), (52, 4609), (59, 4654), (61, 4681), (62, 4687), (66, 4711), (67, 4723), (68, 4732), (76, 4813), (89, 4957), (91, 4981), (92, 5014), (93, 5038), (94, 5050), (97, 5116), (99, 5122), (101, 5167), (104, 5218), (111, 5293), (112, 5302), (118, 5374), (128, 5464), (132, 5494), (133, 5497), (134, 5500), (144, 5557), (146, 5572), (152, 5611), (154, 5626), (166, 5704), (186, 5836), (188, 5842), (191, 5887), (193, 5902), (197, 5953), (205, 6004), (210, 6031), (218, 6088), (219, 6097), (235, 6163), (240, 6238),

Gene: Bumble_4 Start: 3366, Stop: 5258, Start Num: 5

Candidate Starts for Bumble_4:

(Start: 5 @3366 has 35 MA's), (24, 3507), (32, 3585), (70, 3873), (106, 4329), (225, 5109), (233, 5136),

Gene: CalWood4100_4 Start: 3372, Stop: 5192, Start Num: 5

Candidate Starts for CalWood4100_4:

(Start: 5 @3372 has 35 MA's), (16, 3432), (95, 4209), (126, 4431), (134, 4482), (135, 4491), (146, 4557), (157, 4653), (184, 4731), (188, 4767), (189, 4770), (203, 4911), (240, 5136),

Gene: Chipper1996_50 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for Chipper1996_50:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (127, 5422), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (200, 5923), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Chocolat_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for Chocolat_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Chubster_5 Start: 4237, Stop: 6216, Start Num: 3

Candidate Starts for Chubster_5:

(Start: 3 @4237 has 25 MA's), (10, 4279), (11, 4282), (12, 4285), (24, 4390), (27, 4429), (28, 4447), (32, 4468), (38, 4495), (39, 4498), (48, 4576), (51, 4603), (56, 4636), (60, 4657), (62, 4687), (65, 4711), (67, 4723), (70, 4753), (76, 4813), (81, 4855), (82, 4870), (85, 4888), (91, 4981), (94, 5050), (97, 5116), (99, 5122), (116, 5299), (134, 5458), (146, 5530), (156, 5620), (166, 5662), (170, 5677), (172, 5689), (175, 5701), (178, 5713), (179, 5722), (191, 5827), (198, 5899), (200, 5917), (208, 5962), (226, 6067), (229, 6076), (240, 6175),

Gene: Circuit_4 Start: 3354, Stop: 5246, Start Num: 5

Candidate Starts for Circuit_4:

(Start: 5 @3354 has 35 MA's), (32, 3573), (70, 3861), (106, 4317), (126, 4500), (152, 4665), (188, 4839), (225, 5097), (233, 5124),

Gene: Colucci_5 Start: 4249, Stop: 6198, Start Num: 3

Candidate Starts for Colucci_5:

(Start: 3 @4249 has 25 MA's), (8, 4282), (9, 4288), (17, 4324), (21, 4375), (27, 4441), (28, 4459), (31, 4471), (36, 4495), (39, 4510), (40, 4528), (42, 4537), (48, 4588), (49, 4600), (51, 4615), (60, 4669), (65, 4723), (67, 4735), (81, 4867), (84, 4894), (85, 4900), (91, 4993), (97, 5128), (99, 5134), (103, 5206), (109, 5236), (110, 5239), (116, 5275), (132, 5437), (133, 5440), (134, 5443), (146, 5515), (152, 5554), (154, 5569), (156, 5605), (160, 5641), (166, 5647), (174, 5686), (191, 5818), (202, 5917), (207, 5950), (236, 6085), (240, 6154),

Gene: Conboy_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for Conboy_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (127, 5422), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (200, 5923), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: DrYang_5 Start: 4234, Stop: 6165, Start Num: 3

Candidate Starts for DrYang_5:

(Start: 3 @4234 has 25 MA's), (8, 4267), (10, 4276), (12, 4282), (22, 4363), (27, 4426), (28, 4444), (31, 4456), (32, 4465), (39, 4495), (44, 4540), (48, 4573), (49, 4585), (51, 4600), (52, 4606), (55, 4627), (56, 4633), (59, 4651), (60, 4654), (62, 4684), (65, 4708), (81, 4852), (82, 4867), (84, 4879), (85, 4885), (91, 4978), (96, 5110), (97, 5113), (99, 5119), (100, 5137), (101, 5167), (116, 5233), (120, 5284), (128, 5365), (132, 5395), (134, 5401), (146, 5473), (152, 5512), (156, 5563), (168, 5614), (169, 5617), (185, 5695), (188, 5725), (191, 5770), (202, 5869), (203, 5875), (206, 5893), (216, 5965), (234, 6031), (240, 6109),

Gene: EastWest_4 Start: 3370, Stop: 5088, Start Num: 5

Candidate Starts for EastWest_4:

(4, 3364), (Start: 5 @3370 has 35 MA's), (19, 3463), (20, 3475), (24, 3511), (25, 3535), (30, 3574), (48, 3700), (71, 3907), (78, 3964), (91, 4117), (98, 4255), (143, 4567), (145, 4585), (150, 4606), (151, 4615), (178, 4807), (202, 5020), (203, 5026),

Gene: EdgarPoe_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for EdgarPoe_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (127, 5422), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833),

(198, 5905), (200, 5923), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Franzy_4 Start: 3427, Stop: 5181, Start Num: 5

Candidate Starts for Franzy_4:

(Start: 5 @3427 has 35 MA's), (15, 3475), (17, 3490), (20, 3532), (24, 3568), (25, 3592), (26, 3601), (30, 3631), (33, 3649), (40, 3694), (49, 3766), (53, 3787), (54, 3790), (62, 3865), (63, 3889), (69, 3928), (77, 4009), (78, 4021), (84, 4075), (91, 4174), (97, 4309), (98, 4312), (136, 4618), (150, 4699), (158, 4780), (164, 4813), (177, 4891), (201, 5107), (204, 5128), (205, 5131),

Gene: GoldDust_6 Start: 5200, Stop: 7305, Start Num: 3

Candidate Starts for GoldDust_6:

(Start: 3 @5200 has 25 MA's), (12, 5248), (24, 5353), (52, 5572), (59, 5617), (62, 5644), (69, 5695), (74, 5755), (88, 5908), (121, 6325), (137, 6466), (139, 6475), (147, 6529), (162, 6658), (205, 6997), (224, 7120), (229, 7135), (238, 7186), (240, 7240), (241, 7243), (245, 7261), (247, 7294),

Gene: Gooberta_6 Start: 5200, Stop: 7305, Start Num: 3

Candidate Starts for Gooberta_6:

(Start: 3 @5200 has 25 MA's), (12, 5248), (24, 5353), (52, 5572), (59, 5617), (62, 5644), (69, 5695), (74, 5755), (88, 5908), (121, 6325), (137, 6466), (139, 6475), (147, 6529), (162, 6658), (205, 6997), (224, 7120), (229, 7135), (238, 7186), (240, 7240), (241, 7243), (245, 7261), (247, 7294),

Gene: GravityBall_4 Start: 3437, Stop: 5149, Start Num: 5

Candidate Starts for GravityBall_4:

(Start: 5 @3437 has 35 MA's), (17, 3500), (20, 3542), (24, 3578), (25, 3602), (31, 3647), (40, 3701), (47, 3746), (48, 3761), (58, 3836), (67, 3923), (68, 3932), (72, 3980), (75, 3998), (77, 4016), (78, 4028), (80, 4043), (83, 4079), (86, 4103), (91, 4181), (98, 4319), (117, 4472), (150, 4667), (156, 4733), (160, 4769), (189, 4937), (195, 5024), (199, 5066), (202, 5078), (205, 5096), (207, 5111), (212, 5141),

Gene: Grekaycon_4 Start: 3446, Stop: 5158, Start Num: 5

Candidate Starts for Grekaycon_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (46, 3749), (47, 3755), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (91, 4190), (97, 4325), (98, 4328), (130, 4562), (158, 4754), (160, 4775), (183, 4895), (187, 4943), (189, 4946), (193, 5006), (199, 5075), (202, 5087), (207, 5120),

Gene: Hirko_5 Start: 4669, Stop: 6780, Start Num: 3

Candidate Starts for Hirko_5:

(Start: 3 @4669 has 25 MA's), (12, 4717), (19, 4774), (52, 5041), (59, 5086), (62, 5113), (74, 5224), (88, 5377), (121, 5797), (139, 5947), (147, 6001), (162, 6130), (179, 6238), (205, 6472), (224, 6595), (229, 6610), (238, 6661), (240, 6715), (241, 6718), (245, 6736), (247, 6769),

Gene: HumptyDumpty_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for HumptyDumpty_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: JKerns_4 Start: 3446, Stop: 5155, Start Num: 5

Candidate Starts for JKerns_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (46, 3749), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (91, 4190), (97, 4325), (98, 4328), (117, 4475), (124, 4520), (130, 4559), (158, 4751), (160, 4772), (171, 4805), (183, 4892), (187, 4940), (189, 4943), (193, 5003), (199, 5072), (202, 5084), (207, 5117),

Gene: JaNo_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for JaNo_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Jawnski_4 Start: 3427, Stop: 5181, Start Num: 5

Candidate Starts for Jawnski_4:

(Start: 5 @3427 has 35 MA's), (15, 3475), (17, 3490), (20, 3532), (24, 3568), (25, 3592), (26, 3601), (30, 3631), (33, 3649), (40, 3694), (49, 3766), (53, 3787), (54, 3790), (62, 3865), (77, 4009), (78, 4021), (84, 4075), (91, 4174), (97, 4309), (98, 4312), (136, 4618), (150, 4699), (158, 4780), (164, 4813), (177, 4891), (201, 5107), (204, 5128), (205, 5131),

Gene: JayCookie_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for JayCookie_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (200, 5923), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Jordan_4 Start: 3446, Stop: 5155, Start Num: 5

Candidate Starts for Jordan_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (46, 3749), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (90, 4187), (91, 4190), (97, 4325), (98, 4328), (117, 4475), (124, 4520), (129, 4547), (130, 4559), (158, 4751), (160, 4772), (171, 4805), (183, 4892), (187, 4940), (189, 4943), (193, 5003), (199, 5072), (202, 5084), (207, 5117),

Gene: KBurrousTX_5 Start: 4261, Stop: 6249, Start Num: 3

Candidate Starts for KBurrousTX_5:

(Start: 3 @4261 has 25 MA's), (6, 4282), (7, 4288), (8, 4294), (13, 4312), (21, 4387), (27, 4453), (28, 4471), (36, 4507), (37, 4510), (38, 4519), (40, 4540), (48, 4600), (49, 4612), (51, 4627), (55, 4654), (60, 4681), (61, 4705), (65, 4735), (67, 4747), (76, 4837), (82, 4894), (84, 4906), (85, 4912), (87, 4945), (91, 5005), (93, 5062), (95, 5104), (96, 5137), (99, 5146), (101, 5194), (113, 5299), (127, 5446), (132, 5482), (134, 5488), (146, 5560), (152, 5599), (154, 5614), (156, 5650), (168, 5701), (188, 5812), (191, 5857), (192, 5869), (200, 5947), (203, 5962), (206, 5980), (214, 6034), (240, 6193),

Gene: Kabreeze_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for Kabreeze_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056),

(97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: King2_4 Start: 3427, Stop: 5181, Start Num: 5

Candidate Starts for King2_4:

(Start: 5 @3427 has 35 MA's), (15, 3475), (17, 3490), (20, 3532), (24, 3568), (25, 3592), (26, 3601), (33, 3649), (40, 3694), (49, 3766), (53, 3787), (54, 3790), (62, 3865), (63, 3889), (77, 4009), (78, 4021), (84, 4075), (91, 4174), (97, 4309), (98, 4312), (136, 4618), (150, 4699), (158, 4780), (160, 4801), (164, 4813), (177, 4891), (201, 5107), (204, 5128), (205, 5131),

Gene: Klevey_4 Start: 3372, Stop: 5192, Start Num: 5

Candidate Starts for Klevey_4:

(Start: 5 @3372 has 35 MA's), (16, 3432), (70, 3882), (95, 4209), (157, 4653), (184, 4731), (188, 4767), (203, 4911), (213, 4974), (240, 5136),

Gene: LeeroyJ_4 Start: 3437, Stop: 5149, Start Num: 5

Candidate Starts for LeeroyJ_4:

(Start: 5 @3437 has 35 MA's), (17, 3500), (20, 3542), (24, 3578), (25, 3602), (31, 3647), (40, 3701), (47, 3746), (48, 3761), (58, 3836), (67, 3923), (68, 3932), (72, 3980), (75, 3998), (77, 4016), (78, 4028), (80, 4043), (83, 4079), (86, 4103), (91, 4181), (98, 4319), (117, 4472), (150, 4667), (156, 4733), (160, 4769), (189, 4937), (195, 5024), (199, 5066), (202, 5078), (205, 5096), (207, 5111), (212, 5141),

Gene: Lilmac1015_4 Start: 3372, Stop: 5192, Start Num: 5

Candidate Starts for Lilmac1015_4:

(Start: 5 @3372 has 35 MA's), (16, 3432), (95, 4209), (126, 4431), (134, 4482), (135, 4491), (146, 4557), (157, 4653), (184, 4731), (188, 4767), (189, 4770), (203, 4911), (240, 5136),

Gene: Linus_5 Start: 4240, Stop: 6219, Start Num: 3

Candidate Starts for Linus_5:

(Start: 3 @4240 has 25 MA's), (10, 4282), (11, 4285), (12, 4288), (24, 4393), (27, 4432), (28, 4450), (32, 4471), (38, 4498), (39, 4501), (48, 4579), (49, 4591), (51, 4606), (56, 4639), (60, 4660), (62, 4690), (65, 4714), (67, 4726), (70, 4756), (76, 4816), (81, 4858), (82, 4873), (85, 4891), (91, 4984), (94, 5053), (97, 5119), (99, 5125), (109, 5266), (116, 5302), (134, 5461), (146, 5533), (156, 5623), (166, 5665), (170, 5680), (172, 5692), (175, 5704), (178, 5716), (179, 5725), (186, 5779), (191, 5830), (198, 5902), (200, 5920), (208, 5965), (226, 6070), (229, 6079), (240, 6178), (242, 6184),

Gene: Lukepolites_4 Start: 3497, Stop: 5341, Start Num: 5

Candidate Starts for Lukepolites_4:

(4, 3491), (Start: 5 @3497 has 35 MA's), (18, 3584), (37, 3731), (43, 3776), (44, 3788), (57, 3893), (114, 4487), (137, 4643), (181, 4865), (188, 4913), (190, 4940), (200, 5045), (215, 5141), (225, 5177), (240, 5288), (245, 5309), (246, 5321),

Gene: Lymara_5 Start: 4237, Stop: 6216, Start Num: 3

Candidate Starts for Lymara_5:

(2, 4189), (Start: 3 @4237 has 25 MA's), (10, 4279), (11, 4282), (12, 4285), (24, 4390), (27, 4429), (28, 4447), (31, 4459), (32, 4468), (39, 4498), (44, 4543), (48, 4576), (49, 4588), (51, 4603), (55, 4630), (56, 4636), (60, 4657), (65, 4711), (67, 4723), (70, 4753), (81, 4855), (82, 4870), (85, 4888), (91, 4981), (94, 5050), (97, 5116), (99, 5122), (107, 5248), (116, 5299), (134, 5458), (142, 5491), (146, 5530), (156, 5620), (166, 5662), (170, 5677), (175, 5701), (178, 5713), (179, 5722), (186, 5776), (191, 5827), (198, 5899), (200, 5917), (205, 5944), (208, 5962), (220, 6037), (226, 6067), (229, 6076), (240, 6175),

Gene: Martha_4 Start: 3446, Stop: 5158, Start Num: 5

Candidate Starts for Martha_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (38, 3692), (46, 3749), (47, 3755), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (91, 4190), (97, 4325), (98, 4328), (130, 4562), (158, 4754), (160, 4775), (183, 4895), (187, 4943), (189, 4946), (193, 5006), (199, 5075), (202, 5087), (207, 5120),

Gene: Mordred_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for Mordred_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: MoyaNatalis_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for MoyaNatalis_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (200, 5923), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Music_6 Start: 5070, Stop: 7175, Start Num: 3

Candidate Starts for Music_6:

(1, 4815), (Start: 3 @5070 has 25 MA's), (12, 5118), (24, 5223), (52, 5442), (59, 5487), (62, 5514), (69, 5565), (74, 5625), (88, 5778), (121, 6195), (137, 6336), (139, 6345), (147, 6399), (162, 6528), (205, 6867), (224, 6990), (229, 7005), (238, 7056), (240, 7110), (241, 7113), (245, 7131), (247, 7164),

Gene: Nandito_4 Start: 3381, Stop: 5207, Start Num: 5

Candidate Starts for Nandito_4:

(Start: 5 @3381 has 35 MA's), (41, 3651), (97, 4254), (126, 4440), (135, 4500), (157, 4662), (184, 4740), (188, 4776), (203, 4920), (231, 5049), (240, 5145),

Gene: NathanVaag_4 Start: 3427, Stop: 5187, Start Num: 5

Candidate Starts for NathanVaag_4:

(Start: 5 @3427 has 35 MA's), (15, 3475), (17, 3490), (20, 3532), (23, 3565), (24, 3568), (25, 3592), (26, 3601), (33, 3649), (40, 3694), (45, 3730), (49, 3766), (53, 3787), (54, 3790), (62, 3865), (77, 4009), (78, 4021), (84, 4075), (91, 4174), (97, 4309), (98, 4312), (150, 4705), (153, 4723), (158, 4786), (160, 4807), (164, 4819), (177, 4897), (190, 5005), (201, 5113), (204, 5134), (205, 5137),

Gene: Nostromo_4 Start: 3572, Stop: 5608, Start Num: 5

Candidate Starts for Nostromo_4:

(Start: 5 @3572 has 35 MA's), (12, 3608), (19, 3665), (20, 3677), (21, 3686), (47, 3884), (48, 3899), (49, 3911), (59, 3977), (71, 4121), (98, 4469), (123, 4757), (131, 4811), (148, 4919), (152, 4940), (162, 5033), (165, 5042), (176, 5093), (185, 5147), (189, 5177), (202, 5321), (207, 5354), (217, 5411), (221, 5429), (222, 5438), (227, 5456), (230, 5462), (237, 5489), (238, 5504), (239, 5546),

Gene: Piccoletto_4 Start: 3427, Stop: 5187, Start Num: 5

Candidate Starts for Piccoletto_4:

(Start: 5 @3427 has 35 MA's), (15, 3475), (17, 3490), (20, 3532), (23, 3565), (24, 3568), (25, 3592), (26, 3601), (33, 3649), (40, 3694), (45, 3730), (49, 3766), (53, 3787), (54, 3790), (62, 3865), (77, 4009), (78, 4021), (84, 4075), (91, 4174), (97, 4309), (98, 4312), (150, 4705), (158, 4786), (160, 4807), (164, 4819), (177, 4897), (190, 5005), (201, 5113), (204, 5134), (205, 5137),

Gene: Pippa_4 Start: 3445, Stop: 5154, Start Num: 5

Candidate Starts for Pippa_4:

(Start: 5 @3445 has 35 MA's), (17, 3508), (20, 3550), (24, 3586), (25, 3610), (31, 3655), (33, 3667), (46, 3748), (47, 3754), (48, 3769), (50, 3790), (51, 3796), (52, 3802), (58, 3844), (72, 3988), (73, 3994), (77, 4024), (78, 4036), (80, 4051), (83, 4087), (86, 4111), (91, 4189), (97, 4324), (98, 4327), (117, 4486), (126, 4537), (138, 4609), (145, 4660), (155, 4720), (160, 4774), (187, 4939), (189, 4942), (191, 4987), (195, 5029), (199, 5071), (202, 5083), (207, 5116), (209, 5122), (212, 5146),

Gene: Prairie_4 Start: 3372, Stop: 5192, Start Num: 5

Candidate Starts for Prairie_4:

(Start: 5 @3372 has 35 MA's), (16, 3432), (70, 3882), (95, 4209), (157, 4653), (184, 4731), (188, 4767), (203, 4911), (240, 5136),

Gene: PrincessTrina_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for PrincessTrina_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (200, 5923), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: RosiePosie_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for RosiePosie_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Scavito_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for Scavito_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Shade_4 Start: 3446, Stop: 5155, Start Num: 5

Candidate Starts for Shade_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (46, 3749), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (90, 4187), (91, 4190), (97, 4325), (98, 4328), (117, 4475), (124, 4520), (130, 4559), (158, 4751), (160, 4772), (171, 4805), (183, 4892), (187, 4940), (189, 4943), (193, 5003), (199, 5072), (207, 5117),

Gene: Sicarius2_4 Start: 3409, Stop: 5202, Start Num: 5

Candidate Starts for Sicarius2_4:

(Start: 5 @3409 has 35 MA's), (17, 3472), (20, 3514), (24, 3550), (25, 3574), (28, 3607), (33, 3631), (40, 3676), (47, 3721), (48, 3736), (55, 3790), (60, 3817), (72, 3955), (77, 3991), (79, 4006), (81, 4030), (91, 4156), (97, 4291), (98, 4294), (105, 4393), (115, 4462), (119, 4501), (122, 4534), (124, 4570), (128, 4591), (132, 4621), (150, 4720), (151, 4729), (158, 4801), (160, 4822), (167, 4843), (177, 4912), (200, 5125), (202, 5134), (205, 5152),

Gene: Sonny_4 Start: 3446, Stop: 5155, Start Num: 5

Candidate Starts for Sonny_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (46, 3749), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (90, 4187), (91, 4190), (97, 4325), (98, 4328), (117, 4475), (124, 4520), (130, 4559), (158, 4751), (160, 4772), (171, 4805), (183, 4892), (187, 4940), (189, 4943), (193, 5003), (199, 5072), (202, 5084), (207, 5117),

Gene: StevieBAY_4 Start: 3437, Stop: 5149, Start Num: 5

Candidate Starts for StevieBAY_4:

(Start: 5 @3437 has 35 MA's), (17, 3500), (20, 3542), (24, 3578), (25, 3602), (31, 3647), (40, 3701), (47, 3746), (48, 3761), (58, 3836), (67, 3923), (68, 3932), (72, 3980), (75, 3998), (77, 4016), (78, 4028), (80, 4043), (83, 4079), (86, 4103), (91, 4181), (98, 4319), (117, 4472), (150, 4667), (156, 4733), (160, 4769), (189, 4937), (195, 5024), (199, 5066), (202, 5078), (205, 5096), (207, 5111), (212, 5141),

Gene: TaeYoung_4 Start: 3446, Stop: 5158, Start Num: 5

Candidate Starts for TaeYoung_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (38, 3692), (46, 3749), (47, 3755), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (91, 4190), (97, 4325), (98, 4328), (130, 4562), (158, 4754), (160, 4775), (183, 4895), (187, 4943), (189, 4946), (193, 5006), (199, 5075), (202, 5087), (207, 5120),

Gene: Timinator_4 Start: 3437, Stop: 5149, Start Num: 5

Candidate Starts for Timinator_4:

(Start: 5 @3437 has 35 MA's), (17, 3500), (20, 3542), (24, 3578), (25, 3602), (31, 3647), (40, 3701), (47, 3746), (48, 3761), (58, 3836), (67, 3923), (68, 3932), (72, 3980), (75, 3998), (77, 4016), (78, 4028), (80, 4043), (83, 4079), (86, 4103), (91, 4181), (98, 4319), (117, 4472), (150, 4667), (156, 4733), (160, 4769), (189, 4937), (195, 5024), (199, 5066), (202, 5078), (205, 5096), (207, 5111), (212, 5141),

Gene: Tophat_5 Start: 4243, Stop: 6222, Start Num: 3

Candidate Starts for Tophat_5:

(Start: 3 @4243 has 25 MA's), (10, 4285), (11, 4288), (12, 4291), (24, 4396), (27, 4435), (28, 4453), (32, 4474), (38, 4501), (39, 4504), (48, 4582), (49, 4594), (51, 4609), (56, 4642), (60, 4663), (62, 4693), (65, 4717), (67, 4729), (70, 4759), (76, 4819), (81, 4861), (82, 4876), (85, 4894), (91, 4987), (94, 5056), (97, 5122), (99, 5128), (109, 5269), (116, 5305), (127, 5422), (134, 5464), (146, 5536), (156, 5626), (166, 5668), (170, 5683), (172, 5695), (175, 5707), (178, 5719), (179, 5728), (186, 5782), (191, 5833), (198, 5905), (200, 5923), (208, 5968), (226, 6073), (229, 6082), (240, 6181), (242, 6187),

Gene: Vibaki_6 Start: 5097, Stop: 7202, Start Num: 3

Candidate Starts for Vibaki_6:

(Start: 3 @5097 has 25 MA's), (12, 5145), (24, 5250), (52, 5469), (59, 5514), (62, 5541), (69, 5592), (74, 5652), (88, 5805), (121, 6222), (137, 6363), (139, 6372), (147, 6426), (162, 6555), (186, 6723), (205, 6894), (224, 7017), (229, 7032), (238, 7083), (240, 7137), (241, 7140), (245, 7158), (247, 7191),

Gene: Vitus_6 Start: 5039, Stop: 7060, Start Num: 3

Candidate Starts for Vitus_6:

(Start: 3 @5039 has 25 MA's), (11, 5084), (12, 5087), (24, 5192), (25, 5216), (62, 5483), (74, 5594), (77, 5615), (88, 5765), (91, 5798), (93, 5855), (108, 6047), (110, 6056), (121, 6155), (123, 6203), (125, 6218), (141, 6320), (147, 6362), (148, 6377), (179, 6569), (182, 6578), (183, 6584), (186, 6629), (191, 6680), (196, 6722), (207, 6812), (223, 6887), (224, 6896), (231, 6914), (234, 6935), (238, 6962), (245, 7031),

Gene: Wyborn_4 Start: 3418, Stop: 5208, Start Num: 5

Candidate Starts for Wyborn_4:

(Start: 5 @3418 has 35 MA's), (17, 3481), (20, 3523), (24, 3559), (25, 3583), (28, 3616), (33, 3640), (40, 3685), (47, 3730), (48, 3745), (55, 3799), (60, 3826), (72, 3964), (77, 4000), (81, 4039), (91, 4165), (97, 4300), (98, 4303), (115, 4468), (119, 4507), (122, 4540), (124, 4576), (128, 4597), (132, 4627), (150, 4726), (151, 4735), (158, 4807), (160, 4828), (167, 4849), (177, 4918), (200, 5131), (202, 5140), (205, 5158),

Gene: Zartrosa_4 Start: 3446, Stop: 5155, Start Num: 5

Candidate Starts for Zartrosa_4:

(Start: 5 @3446 has 35 MA's), (8, 3467), (14, 3488), (17, 3509), (20, 3551), (24, 3587), (25, 3611), (31, 3656), (33, 3668), (46, 3749), (47, 3755), (48, 3770), (51, 3797), (52, 3803), (58, 3845), (72, 3989), (73, 3995), (77, 4025), (78, 4037), (86, 4112), (90, 4187), (91, 4190), (97, 4325), (98, 4328), (117, 4475), (124, 4520), (130, 4559), (158, 4751), (160, 4772), (171, 4805), (183, 4892), (187, 4940), (189, 4943), (193, 5003), (199, 5072), (202, 5084), (207, 5117),